

Third Year B. Tech., Sem V 2021-22

PL3

PRN/ Roll No: 2019BTECS00070

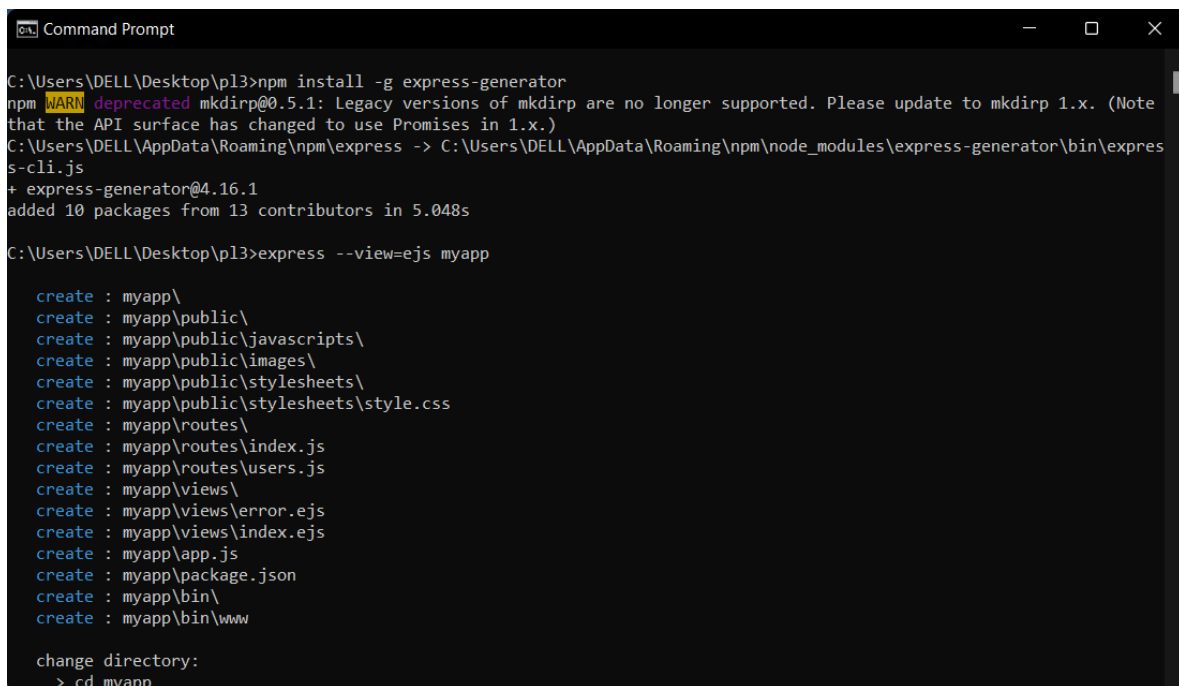
Full name: Prathmesh Killedar

Batch: T2

PRACTICAL NO : 7

To create a Node.js HTTP server and REPL Commands.

1. Create a separate workspace for your project using selected IDE.



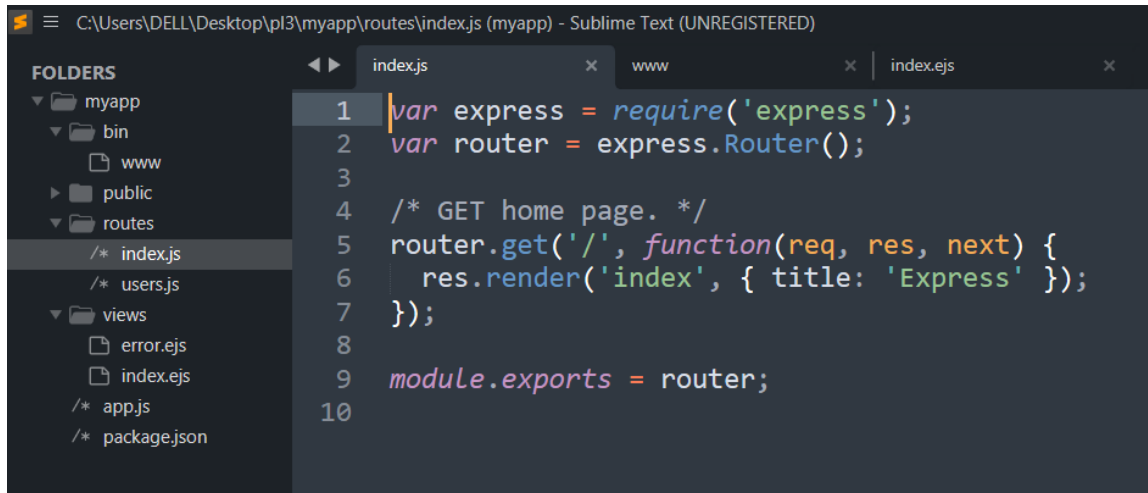
```
Command Prompt
C:\Users\DELL\Desktop\pl3>npm install -g express-generator
npm WARN deprecated mkdirp@0.5.1: Legacy versions of mkdirp are no longer supported. Please update to mkdirp 1.x. (Note that the API surface has changed to use Promises in 1.x.)
C:\Users\DELL\AppData\Roaming\npm\express -> C:\Users\DELL\AppData\Roaming\npm\node_modules\express-generator\bin\express-cli.js
+ express-generator@4.16.1
added 10 packages from 13 contributors in 5.048s

C:\Users\DELL\Desktop\pl3>express --view=ejs myapp

  create : myapp\
  create : myapp\public\
  create : myapp\public\javascripts\
  create : myapp\public\images\
  create : myapp\public\stylesheets\
  create : myapp\public\stylesheets\style.css
  create : myapp\routes\
  create : myapp\routes\index.js
  create : myapp\routes\users.js
  create : myapp\views\
  create : myapp\views\error.ejs
  create : myapp\views\index.ejs
  create : myapp\app.js
  create : myapp\package.json
  create : myapp\bin\
  create : myapp\bin\www

change directory:
> cd myapp
```

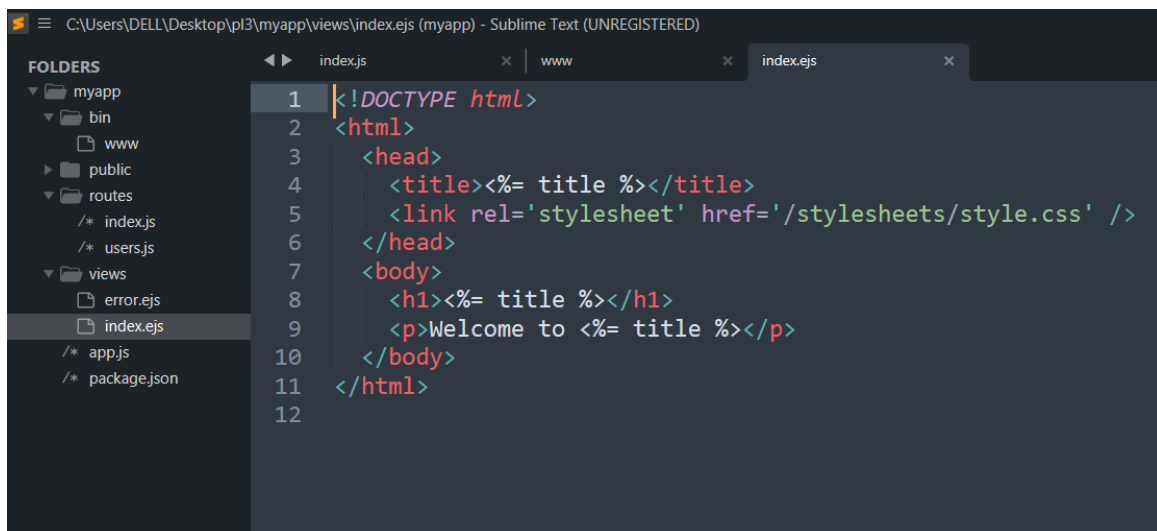
2. Write a program to start a Node.js server on localhost and listens to the client requests on port number 8080.



```
C:\Users\DELL\Desktop\pl3\myapp\routes\index.js (myapp) - Sublime Text (UNREGISTERED)

FOLDERS
└─ myapp
  └─ bin
    └─ www
  └─ public
  └─ routes
    /* index.js
    /* users.js
  └─ views
    error.ejs
    index.ejs
    /* app.js
    /* package.json

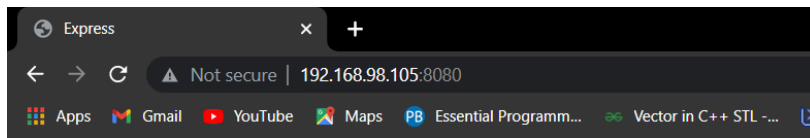
1 var express = require('express');
2 var router = express.Router();
3
4 /* GET home page. */
5 router.get('/', function(req, res, next) {
6   res.render('index', { title: 'Express' });
7 });
8
9 module.exports = router;
10
```



```
C:\Users\DELL\Desktop\pl3\myapp\views\index.ejs (myapp) - Sublime Text (UNREGISTERED)

FOLDERS
└─ myapp
  └─ bin
    └─ www
  └─ public
  └─ routes
    /* index.js
    /* users.js
  └─ views
    error.ejs
    index.ejs
    /* app.js
    /* package.json

1 <!DOCTYPE html>
2 <html>
3   <head>
4     <title><%= title %></title>
5     <link rel='stylesheet' href='/stylesheets/style.css' />
6   </head>
7   <body>
8     <h1><%= title %></h1>
9     <p>Welcome to <%= title %></p>
10  </body>
11 </html>
12
```



3. Change the Node.js IP address and port number and start the server again.

1. Perform the fundamentals programming constructs such as operations, loops, variable assignments and printing their values using Node.js REPL environment.

2. Save the REPL session to a file and reload the REPL session.

```
Command Prompt
GET /favicon.ico 404 2.991 ms - 1013
Terminate batch job (Y/N)? y

C:\Users\DELL\Desktop\p13\myapp>node
Welcome to Node.js v12.19.0.
Type ".help" for more information.
> var x = "Welcome to nodejs"
undefined
> x
'Welcome to nodejs'
> 2 + 3
5
> _ + 1
6
> var a = 5,b=6
undefined
> a+b
11
> b - a
1
> a%b
5
> a/b
0.8333333333333334
> Math.round(a/b)
1
> for(var i =1;i<5;i++) console.log("Loop number -> "+i);
Loop number -> 1
Loop number -> 2
Loop number -> 3
Loop number -> 4
undefined
> .help
.break      Sometimes you get stuck, this gets you out
.clear      Alias for .break
.editor      Enter editor mode
.exit        Exit the repl
.help        Print this help message
.load        Load JS from a file into the REPL session
.save        Save all evaluated commands in this REPL session to a file

Press ^C to abort current expression, ^D to exit the repl
> .save p13-number7
Session saved to: p13-number7
>
(To exit, press ^C again or ^D or type .exit)
> .exit

C:\Users\DELL\Desktop\p13\myapp>
```

```
C:\Users\DELL\Desktop\pl3\myapp>node
Welcome to Node.js v12.19.0.
Type ".help" for more information.
> .load pl3-number7
var x = "Welcome to nodejs"
x
2 + 3
_ + 1
var a = 5,b=6
a+b
b - a
a%b
a/b
Math.round(a/b)
for(var i =1;i<5;i++) console.log("Loop number -> "+i);
Loop number -> 1
Loop number -> 2
Loop number -> 3
Loop number -> 4
undefined
>
```